

Safety Data Sheet according to Regulation (EU) No. 1907/2006

FROWEIN GmbH & Co. KG

Revision date : 06.11.2007

Revision no. : 1,01

CONTRAX-TOP CONCENTRATE

00434-0056

1. Identification of the substance/preparation and of the company/undertaking**Identification of the substance or preparation**

CONTRAX-TOP CONCENTRATE

Use of the substance/preparation

Pesticide

Company/undertaking identification

FROWEIN GmbH & Co. KG

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Contact person

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2. Hazards identification**Classification**

Indications of danger : Harmful

R-phrases :

Harmful by inhalation, in contact with skin and if swallowed.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition/information on ingredients**Chemical characterization** (preparation)

Liquid concentrate

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
249-205-9	28772-56-7	3-[3-(4'-bromo[1,1'-biphenyl]-4-yl) -3-hydroxy-1-phenylpropyl] -4-hydroxy-2-benzopyrone	0,25 %	T+, T, N R26/27/28-48/23/24/25-50-53

Full text of each relevant R phrase can be found in heading 16.

4. First aid measures**General information**

Remove contaminated soaked clothing immediately.

If you feel unwell, seek medical advice.

After inhalation

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.

In the event of symptoms refer for medical treatment.

After contact with skin

Wash off immediately with soap and plenty of water.

Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Seek medical treatment by eye specialist.

After ingestion

Do not induce vomiting.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

Advice to doctor

Administer Vitamin K1 as antidote.

5. Fire-fighting measures

Suitable extinguishing media

Foam, carbon dioxide (CO₂), dry chemical, water-spray.

Extinguishing media which must not be used for safety reasons

Full water jet

Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases

Fire may produce:

Carbon monoxide and carbon dioxide.

Bromine compounds

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Cool containers at risk with water spray jet.

Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.

6. Accidental release measures

Personal precautions

Ensure adequate ventilation.

Use personal protective clothing.

Avoid contact with skin, eyes and clothing.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Take up mechanically and collect in suitable container for disposal.

Additional information

Clean contaminated surface thoroughly.

7. Handling and storage

Handling

Advice on safe handling

Keep container tightly closed.

Avoid contact with skin, eyes and clothing.

When using, do not eat, drink or smoke.

Advice on protection against fire and explosion

No special protective measures against fire required.

Storage

Safety Data Sheet according to Regulation (EU) No. 1907/2006

FROWEIN GmbH & Co. KG

Revision date : 06.11.2007

Revision no. : 1,01

CONTRAX-TOP CONCENTRATE

00434-0056

Requirements for storage rooms and vessels

Keep container tightly closed in a dry, cool and well-ventilated place.

Advice on storage compatibility

Incompatible with oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

Storageclass (VCI)

10

8. Exposure controls/personal protection**Exposure limit values****Exposure limits (EH40)**

CAS-No.	Chemical name	ml/m ³	mg/m ³	F/ml	Category	Origin
57-55-6	Propane-1,2-diol, particulates	-	10		TWA (8 h)	WEL
	Propane-1,2-diol, particulates	-	-		STEL (15 min)	WEL

Exposure controls**Occupational exposure controls**

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

When using, do not eat, drink or smoke.

Take off immediately all contaminated clothing.

Avoid contact with skin, eyes and clothing.

Respiratory protection

No personal respiratory protective equipment normally required.

Hand protection

Solvent-resistant gloves (nitrile rubber).

Eye protection

Tightly fitting goggles

Skin protection

Long sleeved clothing.

9. Physical and chemical properties**General information**

Physical state Liquid

Colour Red

Odour Soft

Important health, safety and environmental information

Test method

Changes in the physical state

Flash point 103 °C

Flammability

Lower explosion limits n. d.

Upper explosion limits

Safety Data Sheet according to Regulation (EU) No. 1907/2006

FROWEIN GmbH & Co. KG

Revision date : 06.11.2007

Revision no. : 1,01

CONTRAX-TOP CONCENTRATE

00434-0056

Ignition temperature	n. d.
Density (at 20 °C) :	1,04 g/cm ³
Water solubility : at (20 °C)	Miscible

10. Stability and reactivity**Conditions to avoid**

To avoid thermal decomposition, do not overheat.

Materials to avoid

Oxidizing agents.

Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Bromine compounds

Additional information

No decomposition if stored and applied as directed.

11. Toxicological information**Acute toxicity**

LD50/oral/rat: 0,56 - 0,84 mg/kg (*)

LD50/dermal/rabbit: 1,71 mg/kg (*)

LC50/inhalativ/rat:: 0,43 µg/kg (*)

(*) 3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2-benzopyrone

Empirical data on effects on humans

Harmful by inhalation, in contact with skin and if swallowed.

Product reduces blood coagulability and causes internal bleeding.

If appropriately handled and if in accordance with the general hygienic rules, no damages to health have become known.

12. Ecological information**Ecotoxicity**

LC50 / Sun perch / 96h = 3,0 mg/l (*)

LC50 / Rainbow trout / 96h = 1,4 mg/l (*)

EC50 / Daphnia / 48h = 2,0 mg/l (*)

EbC50 / Algae / 72 h = 0,17 mg/l (*)

(*) 3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2-benzopyrone

Persistence and degradability

Photolysis: Half-life: 2,1 h (pH 7,3)

Hydrolysis: Half-life: 67 d (pH 7)

Further information

Do not flush into surface water or sanitary sewer system.

Hazard to waters

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. Disposal considerations**Advice on disposal**

Safety Data Sheet according to Regulation (EU) No. 1907/2006

FROWEIN GmbH & Co. KG

Revision date : 06.11.2007

Revision no. : 1,01

CONTRAX-TOP CONCENTRATE

00434-0056

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

Waste disposal number of waste from residues/unused products

200119 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); pesticides
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Re-using the polluted packaging materials is not allowed.

Contaminated packagings are to be treated like the product itself.

14. Transport information**Land transport (ADR/RID)**

ADR/RID class	6.1
Classification code :	T6
Hazard-no.	60
UN number	3026
Hazard label	6.1
ADR/RID packing group	III
Limited quantity :	LQ 7

Description of the goods

Coumarin derivative pesticide, liquid, toxic (3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2-benzopyrone)

Other applicable information (land transport)

LQ 7: combination packaging: 5 l / 30 kg (total gross mass); trays: 5 l / 20 kg (total gross mass).

Inland waterways transport**Marine transport**

IMDG code	6.1
UN number	3026
EmS	F-A; S-A
Limited quantity :	5 L / 30 kg
IMDG packing group	III
Hazard label	6.1

Description of the goods

COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC (bromadiolone)

Other applicable information (marine transport)

Limited quantities (section 3.4): combination packaging: 5 l / 30 kg (total gross mass); trays: 5 l / 20 kg (total gross mass).

Air transport

ICAO/IATA-DGR	6.1
UN/ID number	3026
Hazard label	6.1

Safety Data Sheet according to Regulation (EU) No. 1907/2006

FROWEIN GmbH & Co. KG

Revision date : 06.11.2007

Revision no. : 1,01

CONTRAX-TOP CONCENTRATE

00434-0056

IATA-packing instructions - Passenger	611
IATA-max. quantity - Passenger	60 L
IATA-packing instructions - Cargo	618
IATA-max. quantity - Cargo	220 L
ICAO packing group	III
Limited quantity Passenger	Y611/ 2 L

Description of the goods

COUMARIN DERIVATIVE PESTICIDE, LIQUID, TOXIC (bromadiolone)

15. Regulatory information**Labelling**

According to EC-regulations the product is to be labelled as follows:

Indication of danger Xn - Harmful**Hazardous component(s) to be indicated on label**

3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-2-benzopyrone

R phrases

- 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S phrases

- 02 Keep out of the reach of children.
13 Keep away from food, drink and animal feedingstuffs.
20/21 When using do not eat, drink or smoke.
35 This material and its container must be disposed of in a safe way.
36/37 Wear suitable protective clothing and gloves.
46 If swallowed, seek medical advice immediately and show this container or label.
49 Keep only in the original container.

National regulatory information

- | | |
|-------------------------------|--|
| Employment restrictions | Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing. |
| Water contaminating class (D) | 2 - water contaminating |
| 1999/13/EC (VOC) | 0 % |
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16. Other information**Full text of R-phrases referred to under sections 2 and 3**

- 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.
48/23/24/25 Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
50 Very toxic to aquatic organisms.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
53 May cause long-term adverse effects in the aquatic environment.

Safety Data Sheet according to Regulation (EU) No. 1907/2006

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Revision no. : 1,01

CONTRAX-TOP CONCENTRATE

00434-0056

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

"(n.a. = not applicable; n.d. = not determined)"

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)